GUARANTEE

Terms and Conditions for UK (outside UK contact your local distributor)

We, Applied Energy Products Limited, guarantee this product **for domestic use only,** for the period of 24 months* from the date of purchase.

Within the guarantee period we will resolve, **free of charge,** any manufacturing defects in the product resulting from faulty workmanship or material on condition that:-

a) The appliance has been correctly installed in accordance with our instructions and is being used on the supply circuit or voltage printed on the rating plate.

b) The appliance has been used in accordance with these instructions and has not been tampered with or otherwise subject to misuse, neglect or accident.

c) The appliance has not been taken apart, modified or repaired except by a person authorised by us.

d) Evidence of the date of purchase in the form of an invoice or receipt will be required in order to qualify for an in-guarantee repair.

e) The guarantee period for the products used in commercial applications will be limited to 12 months.

f) For the service work to be undertaken free of charge, the work must be only undertaken by Applied Energy Products Limited, or our approved agents.

g) Service under guarantee has no effect on the expiry date. The guarantee on any exchanged parts or product ends when the original guarantee period ends.

EXCLUSIONS

This guarantee **DOES NOT** cover damage or defects arising from poor or incorrect installation, improper use or lack of maintenance, including build-up of limescale. It is the responsibilty of the installer to check that the installation parameters meet the requirements of the product, and any relevant regulations.

If we are called out to a fault, which is subsequently identified as being an installation fault, we will make a charge. It is important that the routine checks are completed before calling us out, as many issues can be simply diagnosed and resolved.

We make no guarantees as to response times for repairs. We will endeavour to achieve the most timely response possible but while we indicate an average response time, this should not be taken as a guarantee.

The guarantee applies to a repair or replacement (at our discretion) of the product subject to the conditions above, and **DOES NOT** cover compensation for the loss of the product or consequential loss of any kind.

The guarantee does not apply to the repair or replacement of pressure relief devices, sprayheads, hoses, accessories, isolating switches, electrical cable, fuses and/or circuit breakers.

This guarantee does not affect your statutory rights.

* Months 13 to 24 of your free guarantee are conditional on the registration of your product at the time of purchase. Product registration helps us to identify when products are installed, and in what location in order to facilitate a more efficient response to your requests.

After Sales Service

We offer a technical advisory service on the telephone to installers and other customers with problems in the field.

RING 0844 372 7766 (UK ONLY)

Remember to quote the exact type of shower, as written on the front of the shower and on this leaflet.

The model and serial number are located on the bottom face of the shower.
Make a note of those numbers here, and be sure to quote them if you call for advice.

Model Number: 53-_ _ _ _ _ _ _ _ / Serial Number: _ _ _ _ _ _ _ _ _ _ _ _

Note: You may be charged for a service call if you do not have the serial number.

Full details of terms and conditions are available on request from: -

Creda

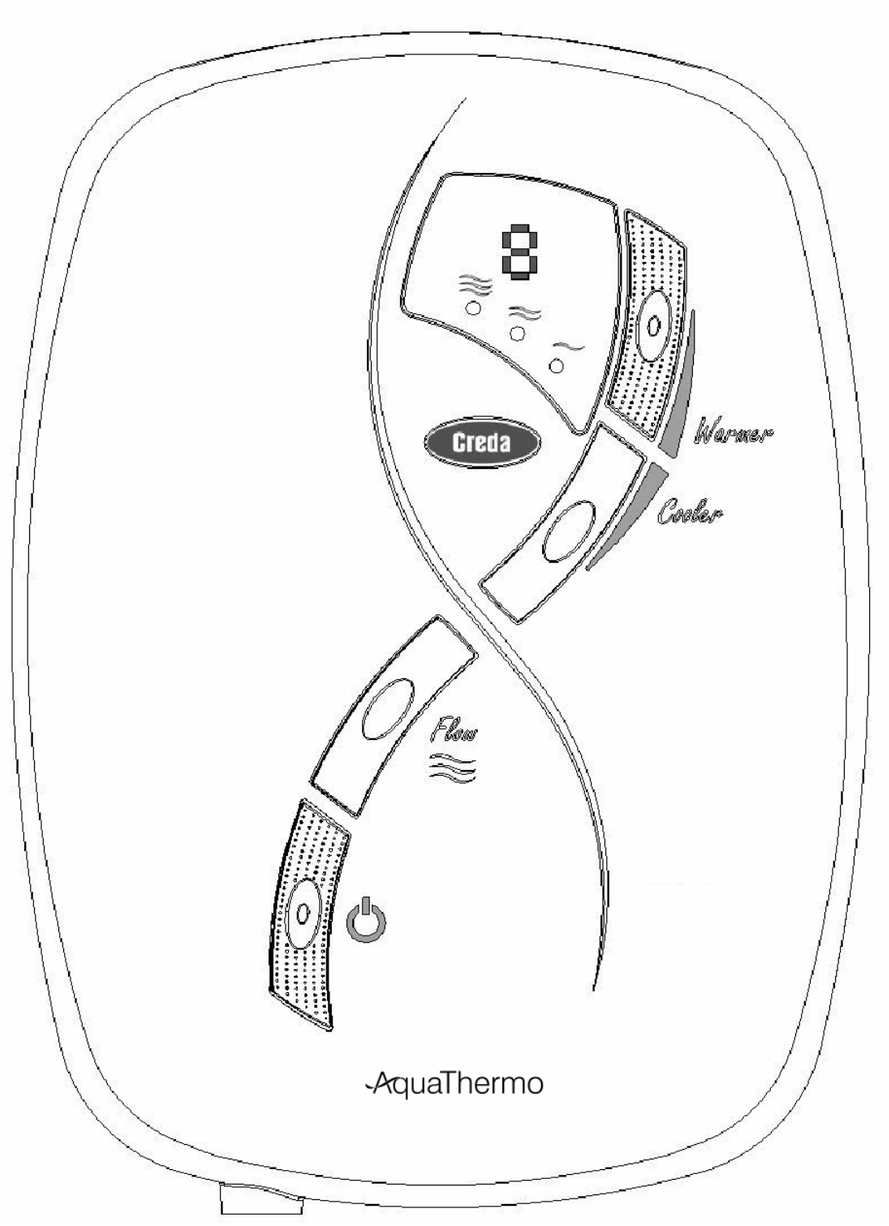
Applied Energy Products Ltd, Morley Way, Peterborough, PE2 9JJ
Website : www.creda-showers.co.uk

(A3 Leaflet: 559-2355-40B)

Creda

AquaThermo

SHOWER HANDBOOK



IMPORTANT
This booklet should be given to the customer after installation and demonstration.

Thank you for choosing a quality "Creda" product manufactured in Peterborough, England.

Contents

User information	Page	Installer Information	Page
How to use your shower	2	Fixing the shower to the wall	8
Routine Maintenance	4	Plumbing	9
How your shower works	5	Electrical	9
Troubleshooting	6	Commissioning	10
Available spares	10	Guarantee	12

Warning

Do Not Switch The Shower On If You Suspect It Of Being Frozen, Wait Until You Are Sure That It Has Been Completely Thawed Out.

How To Use Your Shower

Switch On Electricity at ceiling / isolating switch.

Press Start /Stop Button in the centre.
(Confirmed with a **single bleep**)

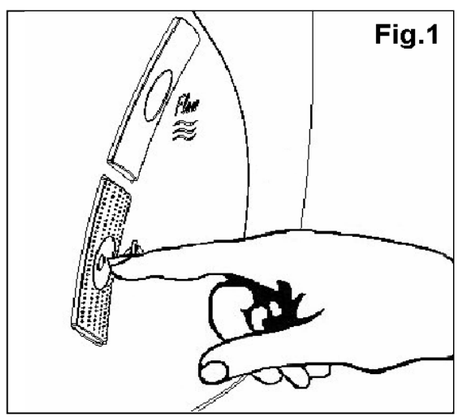
The unit will start and the motorised valve will reset.
Display will usually light up number 1.

The digit will increase until display shows number 6.
The average showering temperature.

When the unit has got close to this setting it **sounds** a **double bleep** and the unit is **ready for use**.

The unit will only count up & double bleep once per shower session.

Flow light will be on **high**.

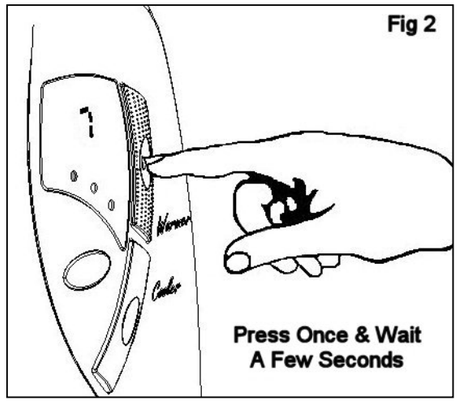


To Increase Temperature - **Press** the **warmer button** once in the centre (Confirmed with a **single bleep**).

The number will change to the new setting.
i.e. Display will change from digit 6 to digit 7

Wait for **a few seconds** for the shower to increase the temperature to the new setting.

Repeat this **for** your **ideal setting** waiting each time for the temperature to be achieved. (Maximum setting is digit 9).



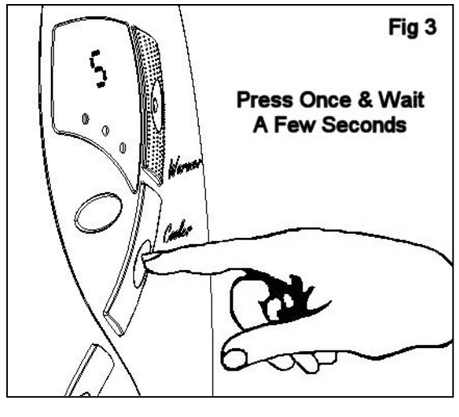
To Decrease Temperature - **Press** the **cooler button** once in the centre (Confirmed with a **single bleep**)

The number will change to the new setting.

i.e. Display will change from digit 6 to digit 5

Wait for **a few seconds** for the shower to decrease the temperature to the new setting.

Repeat this **for** your **ideal setting**, waiting each time for the temperature to be achieved



This page has been left blank for the addition of any notes you may wish to make: -

d) Commissioning

Ensure the water and electricity are switched on to the unit.
Press the START/STOP button then change the temperature setting to number 1 by pressing the COOLER button 5 times.

If the button does not respond, ensure that the flying lead from the PCB has been connected to the front cover (fig 12).

Allow the unit to fill and wait for the water to come out of the handset.

Change setting up to number 6 by pressing the warmer button, check that the outlet temperature increases to comfortable temperature and that, when pressing the flow button the flow does change.

Check for leaks.

Press START/STOP button to switch the unit off.

This completes the commissioning.

Demonstrate Operation To User.

Please leave these instructions with user for future reference.

Spare Parts (RING 0844 372 7750)

Spare parts	Cat No.
Solenoid valve + seals	93-594101
Triac PCB	93-594102
Flow transducer	93-594117
Flow assembly + motor (no outlet)	93-594104
Valve motor	93-594105
Cutout assembly + cables	93-590326
Hose outlet assembly complete	93-594110
Cable entries (top / bottom) Grey	93-594129
Side section (Grey)	93-594130
Logic PCB	93-594118
Front cover assembly complete	93-590359
P.R.V. housing complete	93-594115
Cable pack (all internal cables)	93-594116
1.25m Chrome Shower Hose	93-797641

Please Note:- The fitting of all spares should be supervised by a suitably qualified person.

To Change Flow Rate

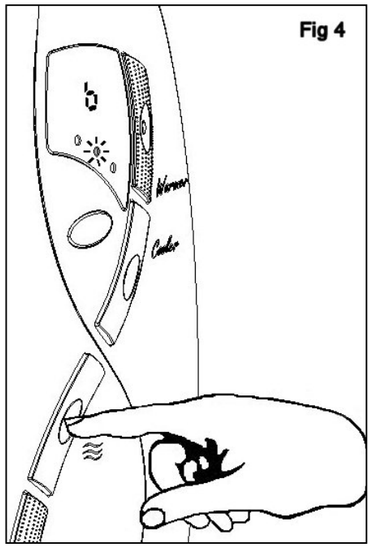


Fig 4

Press the flow button in the centre
(Confirmed with a **single bleep**)

This reduces the flow without changing the temperature setting.
(Note: As the flow changes, the water temperature may go up and down slightly)

Press once and the flow will reduce to **medium**.

Press it **again** and it will reduce to **low**.

On switching on the shower, the flow always comes on in the **high** flow condition.

Switching Off

When you have **finished** showering **press the start /stop button** in the centre. See fig.1 (Confirmed with **3 short bleeps**)

The water will continue to run for a few seconds so that the unit is cooled down ready for the next time the shower is used.
While this is happening the display will circle round and round (see fig.5).

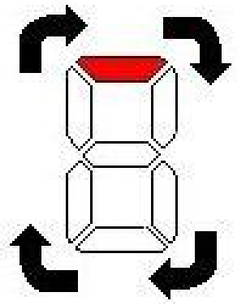


Fig.5

The unit will then switch off automatically.
Switch Off Electricity at ceiling / isolating switch.

Over Temperature Shutdown

If an abnormal condition occurs which causes the water to get too hot,
the **unit will** automatically **shutdown straight away and the water will stop flowing.**
This is to prevent any hot water coming out of the handset.

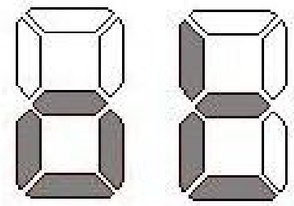


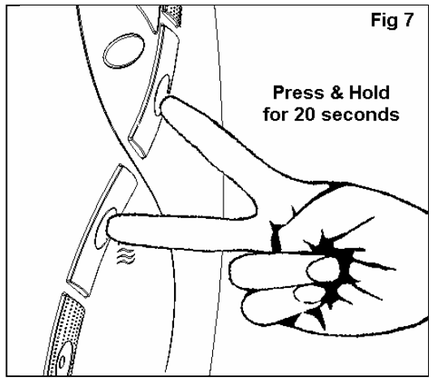
fig. 6

This is indicated by **8 short bleeps** and the display flashing a lowercase **“o”** and then **“t”** (see fig.6)**.** This will continue until the water is at a safe temperature. The unit will then switch off automatically and will need to be restarted in the normal way.

It can take a long time for the unit to reach a safe temperature.
To speed this temperature reduction up, the hot water **can be purged** from the unit.

Purging

While the unit is **in O**ver **T**emperature shutdown **mode press** the **cooler and flow** button **together for 20 seconds**. (See fig.7)



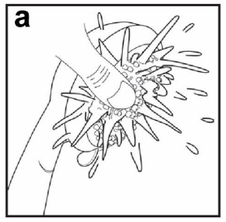
This will switch the water on **only** while the buttons are pressed.

Caution!!
Water Will Be Hot stand clear of the spray from the handset.

The unit will then **switch off automatically** with **3 short bleeps** when a safe water temperature has been reached.

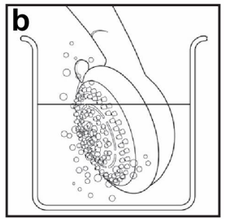
In Order To Maintain The Performance Of Your Shower You Must Clean The Shower Head Regularly.

All water contains particles of lime-scale, which build up in the showerhead and unit reducing the performance.



It is therefore important to clean the showerhead by simply rubbing the rubber nozzles or soaking in proprietary lime-scale remover and rinsing thoroughly before use.

The frequency of this will vary from weekly to quarterly depending on the water hardness and experience.



In some winter conditions, when the incoming mains water is particularly cold it may be necessary to select the inner or outer spray pattern only; this will ensure correct operation of the shower with a slightly lower water flow rate.

After use it is normal for some water to drip from the spray head for a few moments. This helps prevent scale build up over prolonged use.

Routine Maintenance

It is recommend that as well as checking the showerhead as detailed above, the shower unit, riser rail, hose etc. be cleaned using a soft cloth and that the use of abrasive or solvent based cleaning fluid be avoided, especially on any plated finishes.

We recommend that before any cleaning, the isolating switch be turned off, thus avoiding accidentally switching on the shower.

You Must Regularly Inspect The Shower Hose For Wear And Damage. Replace If Necessary, Or Every Two Years, With Our Approved Part.

This appliance is not intended for use by persons (including children and the infirm) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

b) Plumbing

We recommend that a WRAS (Water Regulations Advisory Scheme) listed isolating valve be fitted between the rising main and the unit.
This will allow the unit to be serviced without having to turn off the house water at the stop valve.

The unit should be connected to the mains cold water supply. This must have a minimum running pressure of 0.07 MPa (0.7bar / 10 p.s.i.) and a maximum pressure of 1MPa (10bar /145 p.s.i.)

The unit can be fed from a header tank provided this has a minimum head of 7 metres (23ft).

Standard Ø15mm copper or stainless pipe should be used. Connection to the unit is via a Ø15mm plain shank on the solenoid valve. A compression elbow or push fit connector can be used. (Stainless pipe is not recommended for push fit).

Using an Isolating valve, **flush the pipe work through to remove particles etc.**, before making the final connection to the shower. A blockage in the waterways (particularly the spray plate and solenoid valve) will prevent the unit from working correctly.

The shower is designed to have an open outlet and should only be used with the fittings recommended by the manufacturer.

Warning!! Do Not Fit A Tap On The Shower Outlet. Take Care To Avoid Restricting The Outlet Of The Pressure Relief Device. (See fig. 8 for location)

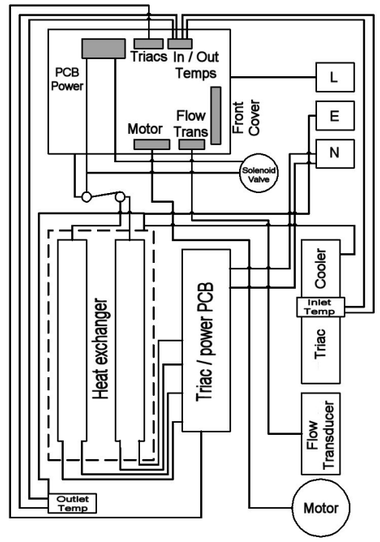


Fig.10

c) Electrical Connections

The electrical installation must be in accordance with the current BS7671 (I.E.E. wiring regulations) and "Part P" of the Building Regulations and/or local regulations.

The unit is designed for a single phase 50 Hz a.c. electrical supply. Please check the rating plate on the unit to see what details apply to your unit.
A means for disconnection in all poles **must be** incorporated in the fixed wiring in accordance with the wiring rules.
We recommend ceiling switches.

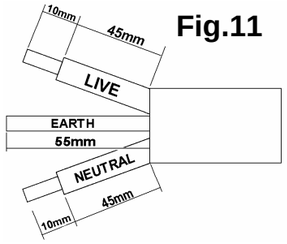
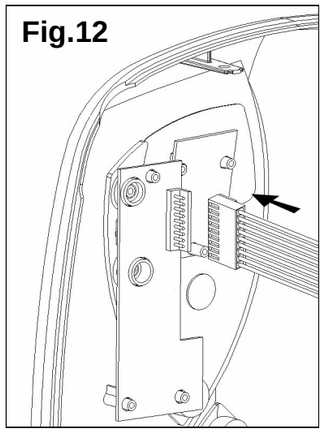


Fig.11

The cable connected to the appliance must be fixed wiring, and should be stripped back according to fig.11

Connect the cable to the terminal block. Ensure that all the retaining screws are **VERY** tight and that no cable insulation is trapped under the screws.



Warning: Failure To Comply With These Instructions Could Result In A Failure Of The Terminal Block.

Warning : This Appliance Must Be Earthed

Replace the side section along with seal.

IMPORTANT! Connect flying lead from PCB to front cover as shown (fig. 12).

Replace the front cover and fasten in position with three screws.

Installation Instructions

ALL WIRING AND INSTALLATION
MUST BE SUPERVISED BY A SUITABLY QUALIFIED PERSON.

We recommend that the installation be done in the following sequence: -

a) Fix the shower to the wall
b) Plumbing
c) Electrical connections
d) Commissioning

Warning. Do Not Install The Shower In A Room Where It May Be Subject To Freezing

a) Fix The Shower To The Wall

When deciding where to place the unit a few things need to be taken into consideration: -

1) The unit **must not** be mounted directly in the path of the spray from the handset

2) The handset could be used over a sink for hair washing.

3) The handset does not come into contact with the used water in the cubicle, bath or basin. A hose retainer is supplied with the accessories (see separate instructions supplied with accessories).

4) Choose a flat piece of wall to avoid the possibility of distorting the backplate and making the front cover a poor fit.

Remove the three cover screws and lift the cover off.

Remove side section complete with seal.
Depending on which water entry is being used (top or bottom) break out the relevant rear support rib using a pair of pliers. (See fig.9)

Identify which pipe and cable entry needs to be cut to enable the services to enter the shower (top or bottom, no trimming required for rear entry) then fit them to the backplate. (See fig.9)

Hold the shower vertically against the wall and mark the top hole first.

Drill the hole to take the rawl plug provided (taking care to keep dust away from the shower).

Put the top screw in first leaving it proud by 5mm approx.
The shower can now be hung on this screw.
Position the shower so that it is vertical then mark and drill the other two holes.
Then fix the shower to the wall.

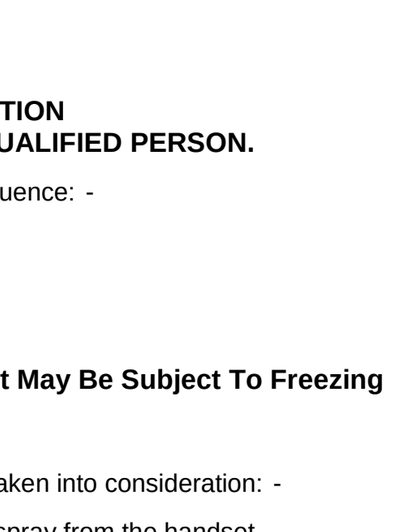


Fig.9
(Rear View)

Fix the riser rail with screws provided (see separate instructions supplied with accessories).

Assemble the accessories as shown in the separate instructions supplied with accessories.

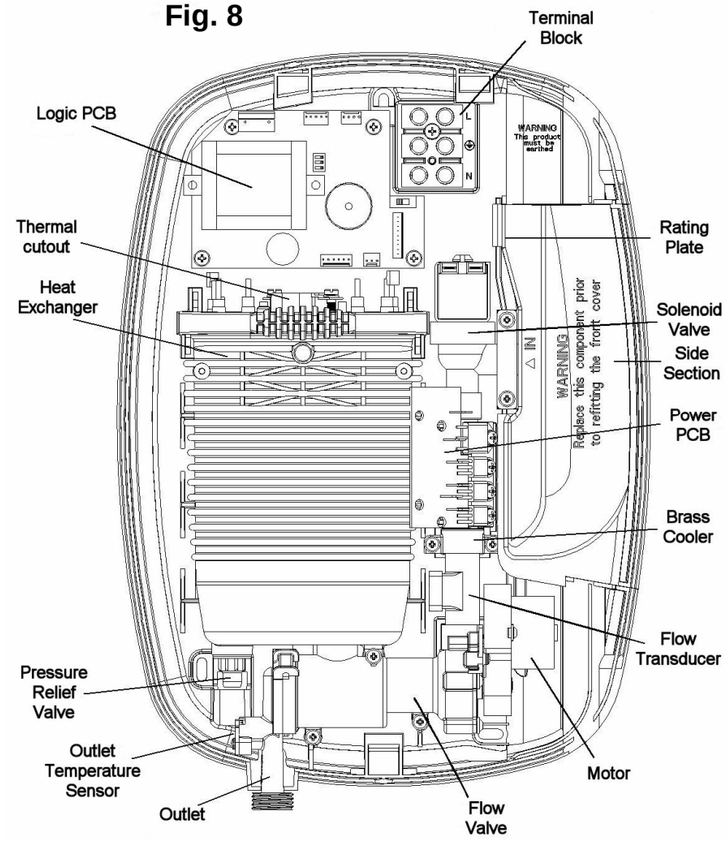
How Your Shower Works

1. Water is heated instantaneously as it flows over the heaters in the plastic heat exchanger assembly.

2. The shower automatically adjusts the power to the heating elements and flow of water to achieve the selected water temperature.
The electronics senses the incoming water temperature and the flow of water through the heat exchanger. It then works out how many heaters to switch on so that the shower temperature matches the temperature selected by the buttons.

3. The amount of hot water available at the selected temperature is limited by the total power of the heater. The ideal flow rate is calculated and adjusted automatically.

Fig. 8



4. The water is turned on and off by the solenoid valve built into the shower.

5. A stabiliser is built into the flow valve to automatically compensate for small fluctuations in water pressure that frequently occur in households. There are three further controls to cater for exceptional reductions in water pressure to prevent the shower from getting too hot.

   a) If the flow of water is less than 1.0 l/min the power to the elements is switched off, but the solenoid valve remains open allowing water to flow through the shower.

   b) If the outlet temperature sensor senses an excessive temperature the flow of water and the heating elements will automatically switch off. The electronics will signal over temperature condition (see “over temperature shutdown” section).

   c) A two stage mechanical thermal cut-out is mounted on the top of the heat exchanger independent of the electronics. Stage one switches the power off to the elements if it senses an excessive temperature. The switch operates with an audible click and will reset if cold water is run through the shower. Stage two only operates if an extreme temperature is sensed. The cut out will permanently switch off and it will then have to be replaced.

6. A pressure relief device is fitted to safeguard against other extreme conditions, and provides a level of appliance protection should an excessive build of pressure occur within the shower. If this operates a replacement part will be required.

Troubleshooting

If the performance of the shower deteriorates in service, follow the checks in the “self help” table below before calling out the contractor.
Any one of the simple adjustments could restore the performance.

If these fail to restore the performance you should seek professional help.

The person who installed the shower is probably the best one to repair it and is certainly the person to contact if you have a problem in the guarantee period.

Self Help Check List

a) Water too HOT	Press the cooler button. Clean spray plate holes.
b) Water too COLD	Press the warmer button.
c) Spray pattern poor	Clean spray plate. Select outer / inner only
d) Display behaves erratically	Switch off electricity at ceiling / isolating switch, wait a few seconds, switch on again. (Note the shower should be switched off each time after use at the ceiling switch.)
e) Water does not flow when start/stop button is pressed lights on “o” and then “t” flashing in display no lights	Note: If there is no water flowing then the shower will automatically switch off after about 5 seconds. Check the water supply is turned on. Unit in over temperature mode see section on “purging” Check ceiling switch is on. Check power is on.
f) Warmer / cooler buttons only adjusts between 2 and 5	See relevant section in professional help
g) Unit makes a whirring noise, especially at the start of the shower session.	This is normal. There is a motor inside the shower used to adjust the flow and this always operates at the start of each shower.

Professional Service Check List

This additional checklist is provided for the benefit of the qualified service representative.

Warning. Switch Off The Electricity At The Isolating Switch Before Removing The Front Cover To Make Checks.

a) Poor temperature control	Check inlet / outlet thermistors to see if they are in circuit. Check for blockage in filter of solenoid valve Check board configuration for correct power rating
b) Water too COLD	Check circuit through thermal cut-out Check circuit through all 4 elements. Test should be done using a low voltage resistance meter whilst the power is switched off at the isolating switch Check circuit through triacs Check working voltage
c) Poor or no control over water flow	Replace inlet valve assembly
d) No water when start button is pressed.	Check water supply. Check circuit through solenoid coil. If ok replace logic PCB
e) Unit has been switched off using stop button but can be heard heating the water	Replace triac PCB
f) Pressure relief valve operated	Check for cause of high pressure and remove it. Replace pressure relief valve (Not covered under guarantee).
g) Temperature buttons only adjust between 2 and 5	Contact Customer service
h) Shower runs for about 5 seconds and then switches off by itself	Flow transducer fault. Check that internal blade “spins” when the water flows : If not, replace transducer.